

8. (Amended) The image display processing method according to claim 5, wherein:

said main window displays a three-dimensional virtual reality space image corresponding to three-dimensional graphics data; and

said sub window displays content of a chat performed via an avatar, which is an alter ego of a user and movable [to any desired position in] within said three-dimensional virtual reality space.

C3
Counsel

10. (Amended) The image providing medium according to claim 6, wherein, if a separated distance in a vertical direction [of] from said sub window to said main window is within a preset predetermined value, said automatic arrangement changing step changes [the] said arrangement of said sub window such that [the] an upper side [thereof] of said sub window comes in alignment on a same horizontal line with [the] an upper side of said main window.

11. (Amended) The image providing medium according to claim 6, wherein:

said main window displays a three-dimensional virtual reality space image corresponding to three-dimensional graphics data; and

said sub window displays content of a chat performed via an avatar, which is an alter ego of a user and movable [to any desired position in] within said three-dimensional virtual reality space.

Sub 4
D

C4

REMARKS

Claims 1-12 are pending in this application. The Examiner rejected claims 1,2, 5-7 and 10 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,621,904 ("Elliott") in view of U.S. Patent No. 5,487,143 ("Southgate"). The Examiner rejected claims 3, 4, 8, 9, 11 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Elliott in view of Southgate and further in view of U.S. Patent No. 5,880,731 ("Liles").

Amendments to the specification have been proposed to correct typographical errors and to refine grammar, spelling and syntax. Amendments to claims 1-3, 5-8 and 10-12 have been proposed to more clearly distinguish the cited art and to refine style and usage. It is respectfully submitted that such amendments are supported by the specification, claims, abstract of the disclosure and the drawings as originally filed, and that no new matter has been added. It is requested that the foregoing amendments to the specification and claims be entered. The Examiner's reconsideration is respectfully requested.

Claim Rejections - 35 U.S.C. § 103

The Examiner rejected claims 1, 2, 5-7 and 10 under 35 U.S.C. § 103(a) as being unpatentable over Elliott in view of Southgate.

Claims 1, 5 and 6

Regarding claims 1, 5 and 6, the Examiner stated that Elliott discloses a system and method of an image display a main window for displaying main information and a sub window for displaying accompanying information associated with main information, and automatically arrangement changing the display position move to main window within a preset predetermined value, and arranging of sub window to a position adjacent to main window (col. 2, line 40 to col. 3, line 30; FIG. 2), although Elliott's description of related art discloses user able manually move the sub-window to user specified position (col. 1) but Elliott's system is automatically arrangement in accordance with preset value (abstract) which does not require user-specified position.

The Examiner's characterization of Elliott is respectfully traversed. Elliott, as understood, teaches a method for displaying a new window on a screen. (See Elliott at col. 2, lines 14-21.) Assuming that parent window 202 is already displayed on the screen, Elliott teaches whether and where new window 203 may be displayed on the screen without obscuring parent

window 202. (See, e.g., Elliott at FIG. 3 and col. 3, line 31 to col. 4, line 42.)

The present invention addresses a quite different situation. In the present application, a main window and a sub window are *already* displayed on a screen. (See, e.g., FIG. 27 and claim 1.) A user then moves the sub window, for example by using a "drag and drop" operation with a mouse. (See specification at page 82, line 23 to p. 83, line 4; FIG. 28, step S51 {the "drop" function is typically referred to as a "clear"}.) In order to further clarify this distinction over Elliott, the following amendment to claim 1 is proposed: "a display position moving means for moving [a display position of] said sub window from a first position, at which said sub window is initially displayed, to a user-specified position." Similar amendments have been proposed for independent claims 5 and 6. It is respectfully submitted that these amendments would not require further searching on the part of the Examiner.

According to one embodiment of the presently-claimed invention, the horizontal distance ("L") between the position to which the sub window has been "dragged" by the user and the main window is evaluated. (See FIG. 28 at step S52.) If L is *greater* than a predetermined value (" L_R "), the sub window remains at the position to which the user dragged it. (See FIG. 28, step S53.) If L is *less* than L_R , then the vertical distance between the top of the sub window and the top of the main window ("H") is evaluated. (See step S54 of FIG. 28.) However, regardless of the value of H, distance L will be set to a predetermined value. (See steps S55 and S56 of FIG. 28, wherein the exemplary predetermined value is zero.) This feature is within the scope of the independent claims of this application, e.g., of claim 1:

an automatic arrangement changing means for automatically changing [, if a separated distance of between said sub window displayed at a display position moved by said display position moving means to said main window is within a preset predetermined value,] an arrangement of said sub window to a position adjacent to said main window if, after said sub window is moved to said user-specified position, a separated distance between said sub window and said main window is within a preset predetermined value.

The foregoing amendment is proposed to make the claim easier to understand and is intended neither to change the scope of the claim nor to require further search by the Examiner.

It is respectfully submitted that Elliott teaches nothing whatsoever about enhancing the process of repositioning an existing window, whether by a "drag and drop" operation by a user or otherwise. As understood, the only discussion in Elliott of a user's movement of a window is in the discussion of the prior art, wherein a user was obligated to reposition a new window which was obscuring a previously-displayed window. (*See, e.g.*, Elliott at col. 1, lines 46-51.)

However, the Examiner asserted that Southgate discloses a user interface control allows the user to move from one area to area (abstract, claim 2). The Examiner therefore concluded that it would have been obvious to one of ordinary skill in the relevant art at the time of invention to modify Elliott's system using Southgate's user interface control for moving a display position of sub window upon user-specified position, because this give user composition of screen layout and furthermore displaying windows this way are utilizing display spaces effective and efficiently for user viewing without obscured information as suggested by Elliott/Southgate's (col. 1-2).

This rejection is respectfully traversed. It is true that Southgate at least *addresses* the issue of repositioning an existing window. However, Southgate does not teach, suggest or indicate the presently-claimed invention. Southgate teaches the division of a screen into a "tiled" area, with no overlap of windows, and a "cascading" or "overlapped" area, where windows may overlap. (*See* Abstract; independent claims 1, 11 and 12; FIG. 7; specification at col. 6, line 44 to col. 7, line 9.)

As understood, the only teaching in Southgate regarding a user's repositioning of a window is with regard to moving a window (the "selected window") from the overlapped area to the tiled area. (*See* col. 8, line 27 to col. 11, line 48 and FIG. 10.) In this aspect of the Southgate invention, it is first determined whether a tiled area exists and whether there is enough space in the tiled area for the selected window. (FIG. 10, steps 224 and

228; specification at col. 9, lines 25-34 and col. 10, lines 18-23.) Then, various subroutines are run to fit the selected window into the tiled area, including:

- (1) a subroutine for incrementally extending the tiled area (FIG. 10, step 244); and (2) a subroutine for shrinking the selected window to fit inside the space available in the tiled area. (FIG. 10, step 242.)

In some situations, the selected window still cannot fit into the tiled area and the user is duly notified. (FIG. 10, step 254.)

In contrast, the presently-claimed invention starts with a main window and a sub window already displayed, with room for both windows on the screen. (See FIGS. 29-32 and claims 1, 5 and 6 {e.g., "a first position, at which said sub window is initially displayed"}.) Although the present invention could include re-sizing windows, neither changing the size of the sub window nor creating more space for the sub window would typically be necessary to practice the invention. Moreover, the presently-claimed invention could be used in a tiled area or an overlapped area, although it would normally be preferable to use the invention in a "tiled" environment.

Claims 2, 7 and 10

Regarding claims 2, 7 and 10, the Examiner stated that Elliott discloses a system for display a sub window adjacent to main window within a preset predetermined value, but that Elliott's system discloses automatic arrangement the horizontal line in reserve order which is lower side instead upper side alignment of both windows (lower side of subwindow with lower side of mainwindow see FIG. 2). However, the Examiner asserted that it would have been obvious to one of ordinary skill in the relevant art at the time of invention for change sub window coordinate to alignment the upper sides instead lower side of main window and sub window, because organizing the display window this way in some cases may maximize the display area.

This rejection is respectfully traversed. Claims 2, 7 and 10 are allowable because the claims from which they depend are patentably distinct

from the art relied upon by the Examiner, as noted above. In addition, claims 2, 7 and 10 recite another feature which is not present in the art relied upon by the Examiner. According to this feature, it has already been determined that distance L is within range L_R after the user moves the sub window. (See step S52 of FIG. 28.) If H is within a certain range (" H_R "), the sub window is displayed according to predetermined values of L and H . (See steps S54 and S56 of FIG. 28, wherein the exemplary predetermined values are zero.) This feature is within the scope of dependent claims 2, 7 and 10. For example, claim 2 recites:

The image display processing apparatus according to claim 1, wherein, if a separated distance in a vertical direction [of] from said sub window to said main window is within a preset predetermined value, said automatic arrangement changing means changes [the] said arrangement of said sub window such that [the] an upper side [thereof] of said sub window comes in alignment on a same horizontal line with [the] an upper side of said main window.

Moreover, the Examiner has used impermissible hindsight reasoning in advancing this rejection. That is, in contending that the invention would be obvious, the Examiner stated in part that "organizing the display window this way in some cases may maximize the display area." In essence, the Examiner has said that the combination is obvious because it yields an advantageous result. If this were the standard of obviousness, then any development whose parts were old and yielded an "advantageous result" (in other words, most inventions) would be obvious. Rather, it is well-established that the suggestion to combine must come from either the cited references or from knowledge held by one of ordinary skill in the art. The Examiner appears to agree that the suggestion does not come from the references and the foregoing discussion makes this fact abundantly clear.

Claims 3, 4, 8, 9, 11 and 12

The Examiner further stated that claims 3, 4, 8, 9, 11 and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Elliott in view of Southgate and further in view of U.S. Patent No. 5,880,731 ("Liles").

Claims 3, 8 and 11

Regarding claims 3, 8 and 11, the Examiner admitted that Elliott's image display system does not disclose that the main window displays 3D Virtual Reality and the sub windows display a chat performed via an avatar. However, the Examiner stated that Liles teaches present invention system relates to a virtual space which allows avatar freely move to desired position in a shared in 3D virtual space (abstract, col. 3-4, Fig. 13). The Examiner concluded that it would have been obvious to one of ordinary skill in the relevant art at the time of invention to combine Elliott's position windows display and Liles's disclosures for obtaining an image display which main window in 3D virtual reality space and sub window of a movable chat avatar, because the Examiner stated that this would enhance system performance and usability.

This rejection is respectfully traversed. These claims are patentable over the references relied upon by the Examiner because the claims from which they depend are patentably distinct over the references cited in rejecting those claims. Moreover, Liles, as understood, does not even teach, suggest or indicate that the chat window (or any window) **could be** moved, much less an enhanced way of positioning the window as claimed in the present application.

In addition, the Examiner has once again used impermissible hindsight reasoning in advancing this rejection. In contending that the invention would be obvious, the Examiner stated in part that the combination would "would enhance system performance and usability." Once again, the Examiner has taken the position that the combination is obvious because it yields an advantageous result. It is respectfully submitted that this is not the proper standard of obviousness.

Claims 4, 9 and 12

Regarding claims 4, 9 and 12, the Examiner stated that Liles's system describes in virtual world 3D graphic data network communication with the server (col. 5-6) but does not disclose any particular language. The Examiner further stated that it would have been obvious to one of ordinary skill in the relevant art at the time of invention to combine to select a well known VRML language for implement VR 3D graphics because this would enhance system performance.

This rejection is respectfully traversed. These claims are patentable over the references relied upon by the Examiner because the claims from which they depend are patentably distinct over the references relied upon in rejecting those claims. Moreover, the Examiner has yet again used impermissible hindsight reasoning in advancing this rejection. In contending that the invention would be obvious, the Examiner stated in part that the combination would "would enhance system performance." The Examiner has again taken the position that the combination is obvious because it yields an advantageous result. It is respectfully submitted that this is not the proper standard of obviousness.

For all of the foregoing reasons, claims 1-12 are allowable over the references relied upon by the Examiner. It is respectfully submitted that this application is now in condition for allowance. The Examiner's reconsideration and further examination are respectfully requested.

Respectfully submitted,

LIMBACH & LIMBACH L.L.P.

Dated: June 20, 2000

By: Charles P. Sampson Reg. No. 28901 for
Roger S. Sampson
Reg. No. 44,314

Attorneys for Applicants